



A Report
to the
Board of
Supervisors

*Maricopa County
Internal Audit
Department*

Ross L. Tate
County Auditor

Treasurer's Office

A Review of Selected Areas

April ■ 2007

Executive Summary	1
Introduction	3
Detailed Information	8

The **County Auditor** is appointed by the Board of Supervisors. The mission of the Internal Audit Department is to provide objective, accurate, and meaningful information about County operations so the Board of Supervisors can make informed decisions to better serve County citizens.

***The mission of Maricopa County is to provide
regional leadership and fiscally responsible,
necessary public services so that residents can
enjoy living in a healthy and safe community.***

Audit Team Members

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April 26, 2007

Fulton Brock, Chairman, Board of Supervisors
Don Stapley, Supervisor, District II
Andrew Kunasek, Supervisor, District III
Max Wilson, Supervisor, District IV
Mary Rose Wilcox, Supervisor, District V

We have completed our review of selected areas within the Maricopa County Treasurer's Office. This audit was performed in accordance with the annual audit plan approved by the Board of Supervisors. The review was conducted by our internal audit staff and by external treasury experts from KPMG LLP.

For the period reviewed, we found the Treasurer's portfolio to be invested in compliance with State Statutes and with Treasurer's Office policy. We also found that interest is apportioned in compliance with authoritative guidelines.

However, we observed a number of internal control weaknesses that should be strengthened. These issues are discussed in this report and include the following areas:

- Lines of Credit and Warrant Registration
- Investment Management
- Human Resource Management
- Account Transaction Information
- Information Technology

Within this report you will find an executive summary and specific information on the areas reviewed. The Treasurer's Office chose not to respond to our recommendations as part of this report and will provide their responses separately. We reviewed the information in this report with the Treasurer and his staff, and appreciate the cooperation provided. If you have any questions or wish to discuss the information presented in this report, please contact Eve Murillo at 506-7245.

Sincerely,

A handwritten signature in cursive script that reads "Ross L. Tate".

Ross L. Tate
County Auditor

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Table of Contents

Executive Summary	1
Introduction	3
Detailed Information	8

Executive Summary

Issue 1 Lines of Credit and Registered Warrants (Page 8)

The County Treasurer's Office funds overdrawn warrants with investment pool funds and allows its servicing bank to extend credit beyond line of credit limits. As a result, the County may not be in first place for receiving repayment, and some Treasurer's Office actions conflict with uniform accounting practices and with State Statutes. Due to the lack of timely, accurate information, pool participants could unknowingly exceed their financial commitment limits. The Treasurer's Office has proposed statutory changes to the Legislature aimed at streamlining warrant registration requirements. The Treasurer's Office should ensure its line of credit management and warrant registration policies are well documented and compliant with applicable State Statutes and the Auditor General's Uniform Accounting Manual standards.

Issue 2 Investment Function (Page 14)

The Treasurer and the Office's Portfolio Manager make key decisions about investments exceeding \$2 billion. For the period reviewed, we found the portfolio to be invested in compliance with State Statutes and with Treasurer's Office policy. We also found that interest is apportioned in compliance with authoritative guidelines. However, investment procedures and day-to-day investment decisions are not documented and sufficient analytical investment information is not compiled and disseminated to investment pool participants. The Treasurer should consider establishing an investment advisory group, document its strategy and procedures, and provide useful portfolio performance reports to investors.

Issue 3 Human Resource Management (Page 17)

We noted human resource management weaknesses in the investment operations area. Qualified professional staff backup is needed for the Investment Portfolio Manager and other key positions. Rigorous background checks are not routinely performed for investment-related staff. Although examining staffing needs was not an objective of this audit, we also observed several other positions that lacked sufficient qualified backup. The Treasurer's Office should revise the Portfolio Manager position description and keep it updated, provide for succession planning for key staff, and strengthen employee screening.

Issue 4 Chart of Accounts (Page 19)

The current structure of the Treasurer's Office chart of accounts does not sufficiently meet the requirements of County management or the County Superintendent of Schools. It does not have the flexibility to keep pace with clients' growing needs and complicates client financial analysis. Treasurer's Office system development strategies should address chart of account deficiencies.

Issue 5 Information System Strategy (Page 21)

A fundamental challenge for the Treasurer's Office has been to implement a cohesive strategic plan to ensure that effective systems align with business goals. The Treasurer's Office does not have an information technology strategic plan; although, since 1998, staff has recognized and discussed the critical operational need to replace the legacy (antiquated) system. New system plans should be executed through a formal information technology governance process as a high priority to ensure sufficient progress and accountability.

Issue 6 Taxpayers' Information Fund (Page 25)

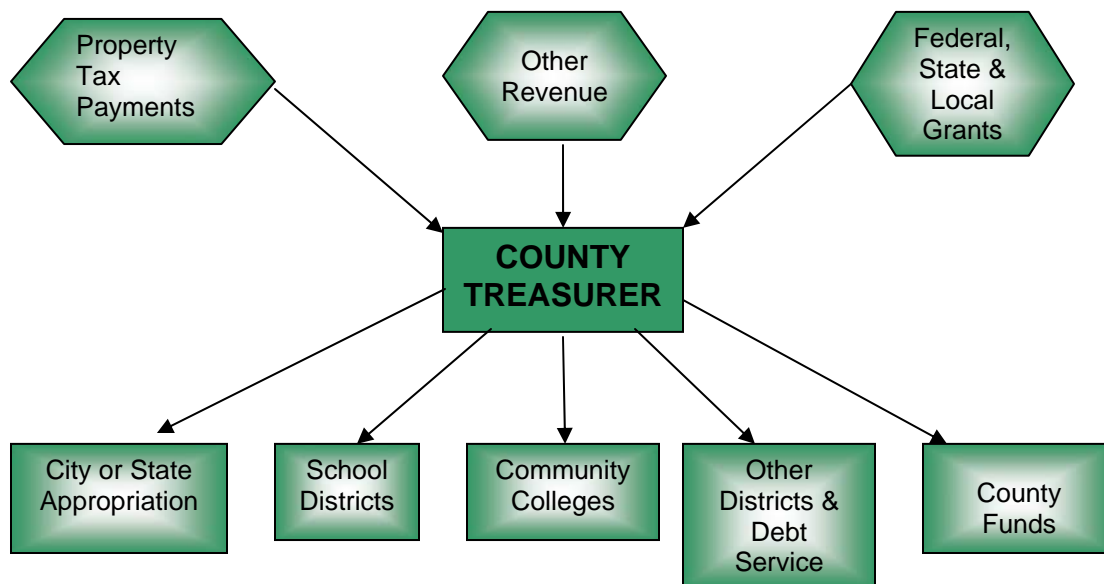
The Treasurer's Office has a dedicated source of available funds, the Taxpayers' Information Fund, which is restricted for information technology upgrades. However, funds are not included in the County budget which functions to provide revenue and expenditure control. To ensure that the Treasurer's Office financial resources are appropriately controlled, Taxpayers' Information Fund activity should be included in the Treasurer's Office budget.

Introduction

Background

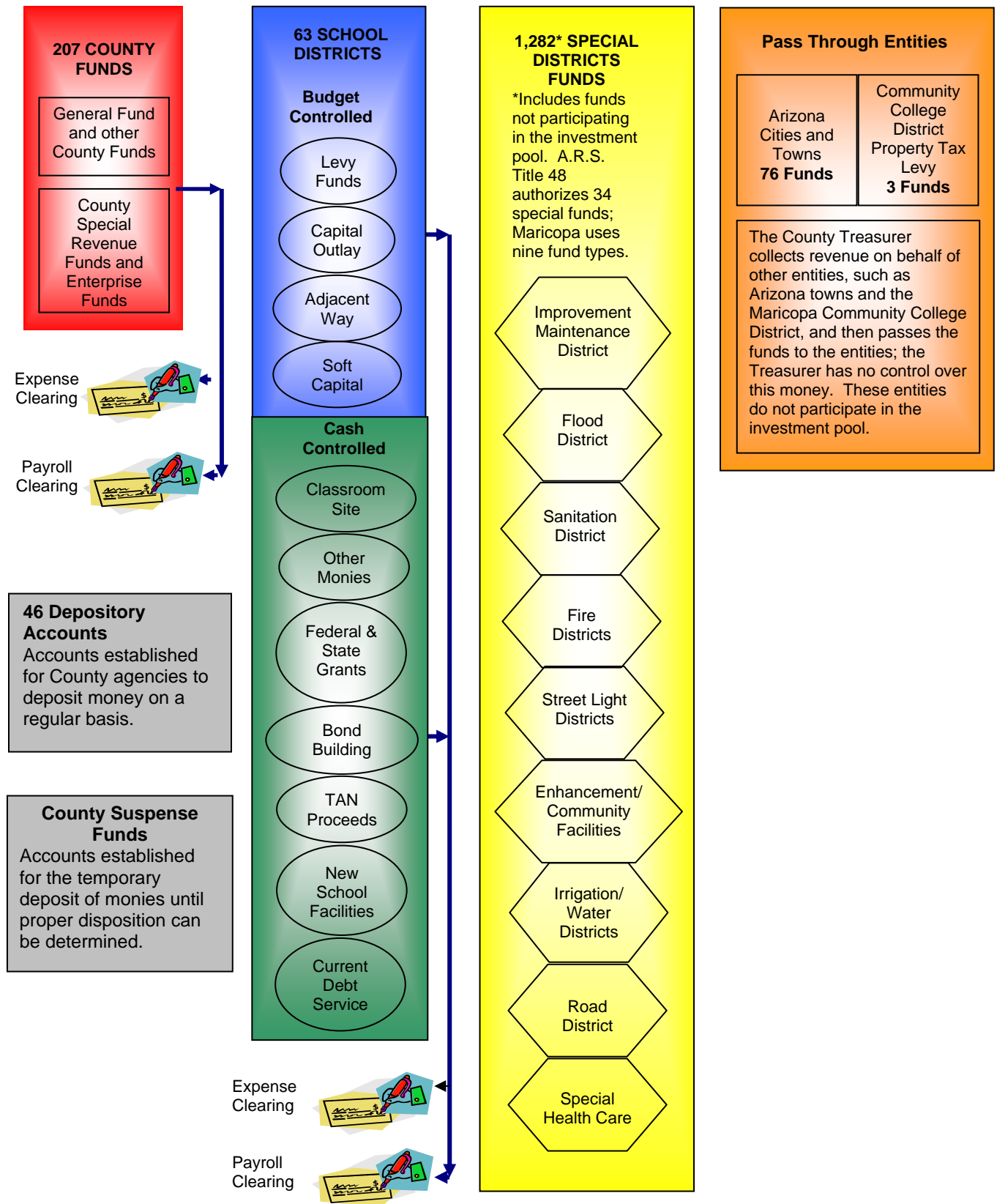
The Maricopa County Treasurer is an elected official chartered to enhance the accountability of public monies to the citizens; the current Treasurer took office in 2004. The County Treasurer's Office serves as the bank for the County and other government entities, including school districts and special taxing districts such as Community Facilities Districts. The Treasurer's Office also collects and distributes property taxes. The Treasurer's Office receives revenues, handles credit accounts, pays school and County warrants, and invests funds. The following graph shows the sources of various revenues and their distribution points:

Inflows and Outflows for County Treasurer



County funds in the investment pool as of September 2006 were \$621 million, 24 percent of pool funds. School districts, with 60 percent of investment pool funds, are the major participants. Over 1,200 Special Taxing Districts also participate in the investment pool, constituting less than one percent.

The graph on the next page is an overview of Treasurer's Office operations and interrelationships.



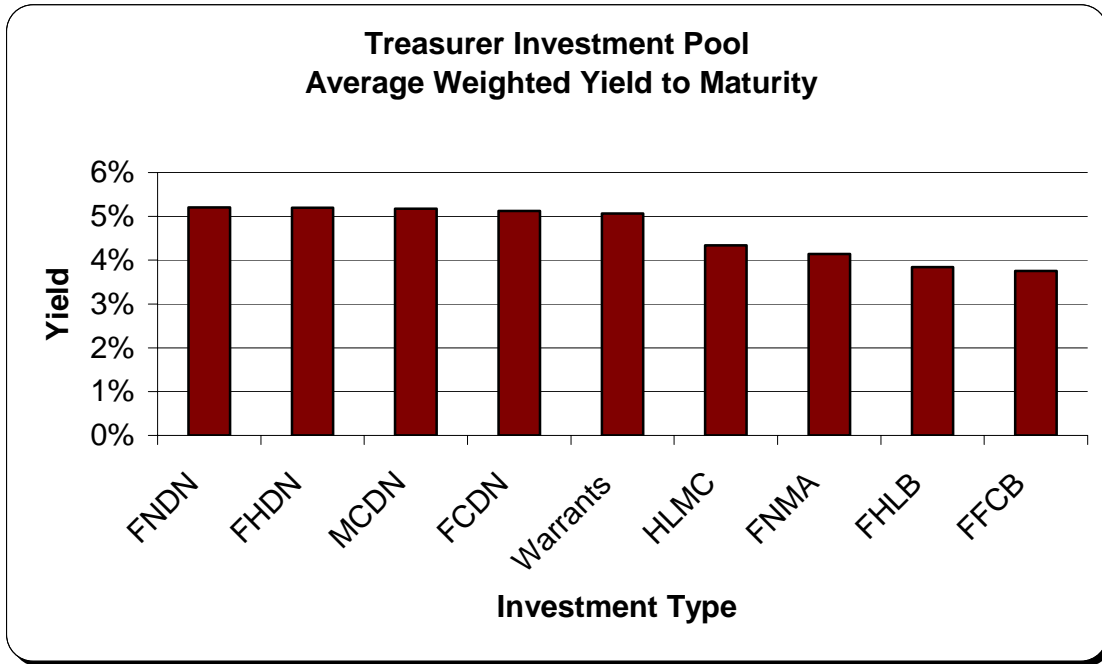
Treasurer's Office is the Investment Arm of County Government

Arizona Revised Statutes (ARS) allow the Treasurer's Office to pool available funds from all pool participants and to invest funds in specified instruments for no longer than a five-year period. We determined that the Treasurer's Office complied with ARS-required types and liquidity for pool investments. On September 30, 2006, the Treasurer's Office held \$2,372,002,231 (face value) in 153 money market investments and an additional \$1.2 million in uninvested liquid cash. Federal Home Loan Bank instruments comprised nearly 50 percent of the portfolio face value.

Eligible investments include the following: (ARS §35-323)

- Certificates of deposit
- Interest-bearing savings
- State Treasurer's pooled investment funds
- Obligations issued or guaranteed by the United States
- Bonds of any county, municipal district, municipal utility, or special taxing district within the state
- Commercial paper of prime quality rated "P1" by Moody's or rated "A1" by Standard and Poor's rating services

The graph on the next page shows the weighted average yield to maturity for each investment type on September 30, 2006. The graph summarizes yields for investment types with different issue dates. The investment portfolio had an average weighted yield to maturity of 4.14 percent. Treasury experts recommend portfolio performance should be benchmarked against equivalent-termed securities, such as US Treasury instruments.

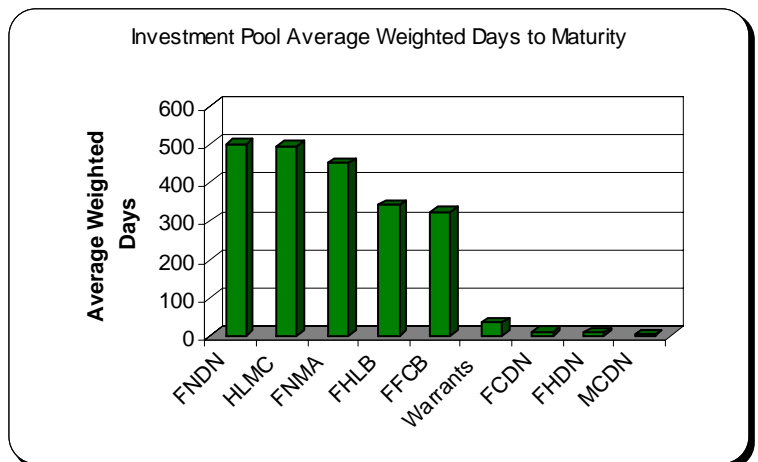
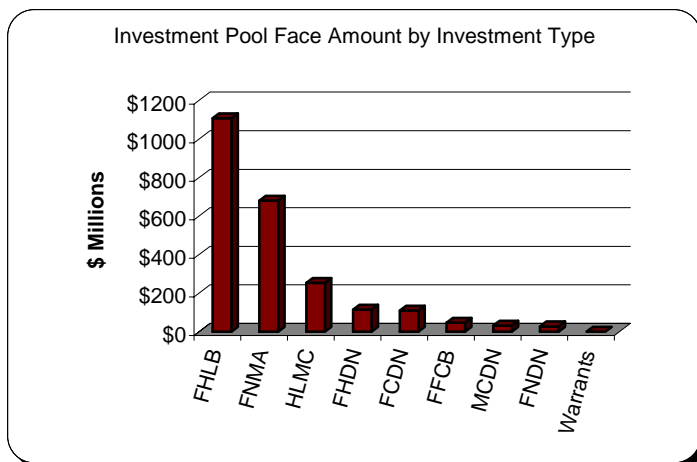


FNDN – Federal National Discount Note
 FHDN – Federal Home Discount Note
 MCDN – Mortgage Center Discount Note
 FCDN – Farm Credit Discount Note
 Warrants – Maricopa County Warrants

HLMC – Federal Home Loan Mortgage Center
 FNMA – Federal National Mortgage Corporation
 FHLB – Federal Home Loan Banks
 FFCB – Federal Farm Credit Banks

Source: Internal Audit analysis of Treasurer's Office portfolio investments.

The graphs below compare the face amount of the Treasurer's Office Investment Pool as of September 30, 2006 with the average weighted days to maturity for the same day.



The Treasurer's Office position in Federal Home Loan Banks was nearly 50% of the September 30, 2006 portfolio face value, with an overall average weighted days to maturity of 355 days.

Source: Internal Audit analysis of Treasurer's Office portfolio investments.

Board of Supervisors' Role

The Board of Supervisors has the responsibility for funds belonging to the County. Funds deposited with the Treasurer's Office that belong to other entities, such as schools and special districts, are not the Board's responsibility to oversee. The Board of Supervisors, functioning as the Board of Deposit for the Treasurer's Office, has the statutory role to select the Treasurer's Office servicing bank. The Board of Deposit also may order the Treasurer to sell securities held for the investment pool. These responsibilities serve all of the entities which have money deposited with the Treasurer's Office, not just the County.

Scope and Methodology

Audit work took place between August and December 2006. Because of the specialized nature of treasury and investment operations, Internal Audit staff was augmented by contracted KPMG staff who were specifically qualified in those functions.

Audit objectives were to determine whether:

- The Treasurer's Office accurately accounts for pool participants in a cash deficit position, including interest expenditure allocations; whether adequate mechanisms exist for recovery of cash deficits in participant pool accounts; and whether all other pool participants' assets are adequately protected from others' cash deficit positions
- Bank-provided Lines of Credit (LOCs) are correctly administered and accounted for, and whether the Treasurer's Office effectively administers LOCs to protect all pool participants
- Interest revenue is appropriately apportioned among pool participants
- Pool participants' risks in the County Treasurer's investment pool are appropriately shared, and whether pool participant classifications are accurately recorded in the Treasurer's investment system
- The Treasurer's Information Technology (IT) General Computing Controls are appropriately designed to adequately support Treasurer's Office operating and financial activities
- The Treasurer's Office chart of account (COA) structure appropriately accounts for and segregates funds (County and non-County), and whether the current COA facilitates efficient County business practices

We interviewed key Treasurer's Office staff and documented existing processes and controls. We obtained and reviewed statutes, Arizona State Auditor General guidance, contracts, and departmental policies and procedures related to pertinent functions. We attempted to identify other treasury organizations with which to compare.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Issue 1 Lines of Credit and Registered Warrants

Summary

The County Treasurer's Office funds overdrawn warrants with investment pool funds and allows its servicing bank to extend credit beyond line of credit limits. As a result, the County may not be in first place for receiving repayment, and some Treasurer's Office actions conflict with uniform accounting practices and with State Statutes. Due to the lack of timely, accurate information, pool participants could unknowingly exceed their financial commitment limits. The Treasurer's Office has proposed statutory changes to the Legislature aimed at streamlining warrant registration requirements. The Treasurer's Office should ensure its line of credit management and warrant registration policies are well documented and compliant with applicable State Statutes and the Auditor General's Uniform Accounting Manual standards.

Few Pool Participant Entities Have a Cash Deficit

Cash deficits occur as a normal part of the business cycle. Governments can experience cash deficits because of large payments on construction projects, in advance of receipt of the tax revenues earmarked for the cost. Negative fund balances-balances in agency funds that are insufficient to pay warrants (as defined in the UAMACT, Uniform Accounting Manual for Arizona County Treasurers)-can be caused by temporary delays in processing transactions or inter-fund transfers. Issued warrants may be paid from fund balances, or in the case of a deficit, from:

- The servicing bank line of credit (LOC) or supplementary bank loans when LOC limits are exceeded
- The Treasurer funding the overdrawn warrants out of investment pool monies (as a result of discussions with the Board of Supervisors, the Treasurer's Office has agreed to no longer use this option)
- Or, the Treasurer's Office could return the unpaid warrant using a formal registered warrant process (NSF)

Warrant: A command of a council, board, or official whose duty it is to pass upon the validity and determine the amount of a claim...to the treasurer to pay money...to a designated person.
--Black's Law Dictionary

The Treasurer's Office, as a part of the contract with its servicing bank (Bank of America), has agreements for revolving business loans, or LOCs, which cover warrants written on overdrawn funds.

We reviewed a 17-month period of investment pool account activity (July 1, 2005 to November 30, 2006). Few participants had cash deficits not covered by a servicing bank LOC. Except for Maricopa County Regional School District (MCRSD), all school districts had positive balances for their individual aggregated funds. Of the 1,266 special taxing districts (non-

school), 29 had cash deficits, but only the four shown below had a negative balance exceeding \$1,000 but no LOC.

Special Taxing Districts with Cash Deficits Exceeding \$1,000	
Whitestone District 1 Cfd Buckeye	\$28,594
Whitestone Westn Overlay Buckeye	\$24,038
Estrella Mtn Rch Cfd	\$ 3,624
DC Ranch Comm Fac Improvement District	\$ 1,439

According to the Treasurer's Accounting Division Manager, there have only been three deficit situations in the last five years (excluding several small amounts associated with Special Taxing Districts) in which the Treasurer's Office funded warrants from investment pool monies. The Treasurer's Office reports that the most recent example occurred with Sentinel School District. The Treasurer's Office included in their September 30, 2006 investment portfolio \$629,227 in Sentinel's "registered" warrants (warrants presented on negative balance accounts) or three-tenths of one percent of the investment pool. Other than MCRSD, we found no other recent example during the audit period (July 2005 through November 2006).

Line of Credit Processes

We contacted ten other Arizona counties to find out their practices for administering LOCs. They state that servicing banks manage the LOC's, but county staff monitors the activity daily. Treasurers pool the cash of their various client entities and invest the funds in aggregate. When pool participants reach LOC limits, the benchmark offices claim they officially register warrants as required by ARS and have formal processes for recording these loans. It should be noted that although these benchmark offices operate under the same statutes, they handle considerably fewer transactions than Maricopa County.

Bank of America LOCs to individual Maricopa County political subdivisions are documented in the servicing bank business loan agreement. From a creditworthiness perspective, each entity stands on its own. Bank of America assesses creditworthiness based upon budget, financial statements or reports, bond ratings, cash flow projections, and other financial information.

Previously, the decision by the Treasurer to extend credit beyond a bank LOC limit, or to take the next step of investing the pool's money to fund the warrant, was based on staff's operating knowledge of the borrower's expected cash flow position, due to semi-annual tax receipts, for example. Yet, because Bank of America LOCs have first position for repayment, funding from the County investment pool represents the greater risk, as bank loans would be repaid first.

There is no formal record of communications and agreements with entities in account deficit positions. In addition, there are no records detailing the terms and conditions for funding accounts in a net deficit position. Lack of documentation could lead to errors in recording amounts recoverable from deficit pool participants. Lack of oversight over the authorization and initiation of undocumented lending could result in losses to the investment pool. The Treasurer's Office

should update policies and procedures to require recording of transactions in a timely manner. Doing so would strengthen the internal control over and reporting framework for deficit accounts.

Funding Decisions

The successive steps in funding County investment pool participants' deficits are set out below:

- At the individual fund level, pool participants transfer money when available from one of their other funds to the fund with deficit balance upon which the warrant was drawn. Participants also may transfer expenses out of the deficit fund and into funds that have cash.
- Once it becomes apparent that a warrant is drawn on a fund with no cash through the standard warrant clearing process, Bank of America will access the pre-approved LOC for the entity and pay the warrant, creating a liability.
- The Treasurer could cover district deficits for a period of time by funding overdrawn warrants with investment pool funds until the servicing bank accessed the entity's LOC or until a registered warrant was created. Interest was charged and earned for this use. The Treasurer's Office does not fully document the obligations of pool participants in a negative cash position to the investment pool, nor do they fully report the impact of these transactions on portfolio performance.

As a result of recent discussions with the Board of Supervisors, the Treasurer will no longer fund warrants on overdrawn funds.

- If the pool participant has drawn down both cash and its LOC, Bank of America, under the terms of its contract, may disburse funds in excess of the LOC limit, but not in excess of the ARS limitation of 45 percent of the school district's unrestricted revenue. According to conversations with the bank, when it lends amounts in excess of the LOC limit, it requires approval by two loan officers and a lending instrument called a "demand note." We did not find this language in the contract. When the Treasurer's Office does not officially register warrants after pool participants exceed their LOC limit, they are out of compliance with Arizona Revised Statutes.

"...If a revolving line of credit has not been obtained for a political subdivision or if the revolving line of credit has been expended, the treasurer shall write or stamp on the face of the warrant or substitute check "not paid for lack of funds" and the date of presentation, and from that time until it is paid, the warrant or substitute check shall bear no more than ten per cent interest per year." ARS §11-635(A)

- If a pool participant does not have an LOC, the Treasurer should register the warrant as unpaid, triggering the formal tracking of interest paid and earned for pool participants.

Our analysis of the Warrant Detail Report data from July 1, 2005 to November 30, 2006, shows that of the 33 school districts borrowing on their LOC, 14 borrowed in excess of LOC limits (MCRSD did not have an LOC). For example, Higley Unified School District, the largest borrower in the sample, exceeded its limit 50 days out of 517, or about 10 percent of the time. The largest amount Higley had outstanding during the 17-month period was \$12.2 million, which was \$9.2 million over its LOC limit. On the Treasurer's Office current automated system, information

to analyze cash deficits and identify warrants that should be registered is not readily available. Because of limited information technology and a lack of administrative procedures, the Treasurer's Office does not use the statutorily prescribed method of registering warrants.

***Districts With LOC Borrowings in Excess of LOC Limits
From July 2005 to November 2006
Funded by Bank (unless otherwise noted)***

District Name	Current LOC Limits	Average (Median) Daily Borrowings	Average (Median) LOC Overage	# of Times Over LOC
Dysart UD	\$10,000,000	\$4,502,155	\$1,536,234	2
Saddle Mt. UD	3,000,000	977,101	1,290,036	20
Higley UD	5,000,000	2,251,761	838,024	39
Chandler UD	14,000,000	4,996,950	459,618	1
Osborn ED	1,500,000	548,466	432,090	8
Cave Creek UD	4,000,000	2,549,112	406,663	3
Paradise Valley UD	7,000,000	3,843,565	358,939	1
Riverside ED	1,000,000	326,416	252,358	44
Queen Creek UD	4,000,000	1,564,551	194,470	5
Union ED	1,500,000	473,565	149,584	38
Sentinel ED	200,000	108,331	53,542	43
Gila Bend UD	950,000	289,253	27,056	2
*Maricopa County Regional School District	0	20,234	18,248	7
Peoria UD	20,000,000	3,627,041	10,055	1
Mobile ED	100,000	27,311	3,459	7
Note: * No Borrowing - Officially Registered Warrants				

Accounting for Line of Credit Transactions

The UAMACT recommends that the Treasurer maintain a Revolving Line of Credit Journal which records transaction detail and repayment history. However, the Treasurer's Office does not maintain such a detailed, comprehensive Journal for each pool participant with an established LOC. Similarly, the Treasurer does not record transaction detail about when an LOC is accessed and repaid. Instead, the Treasurer's Office relies on Bank of America to track and account for LOC balances. Bank of America is able to provide summary LOC reports to the Treasurer's Office on a periodic basis, although not contractually required to do so. However, to effectively track LOC's and monitor ARS compliance, the Treasurer's Office should have an internal reporting process in place.

The Treasurer's Office does not track LOC use compared to individual school district statutory borrowing limits (45 percent of unrestricted revenue) or the LOC limit that would trigger a statutorily required warrant registration. By using commonly available tools, such as Microsoft Access, the Office could maintain an accurate subsidiary journal, as UAMACT recommends, until a new system is implemented. Little manual labor would be involved.

Warrant Registration

Registered warrants are warrants that are returned through the servicing bank as unpaid due to lack of funds. The Treasurer records them in a register, formalizing them as notes payable. Interest must accrue on registered warrants at a rate not to exceed 10 percent per year from the date registered until public notice is given that the Treasurer is ready to redeem or "call" the warrant.

School district finances dictate two types of funds: cash-controlled (restricted) and budget-controlled (unrestricted). Cash-controlled funds can be depleted up to the amount of cash in the fund. Budget-controlled funds may be expended beyond available cash (creating a deficit), up to the budgeted amount. Current financial systems (Treasurer and School Districts) funnel warrants through a clearing account mechanism that does not distinguish between cash-controlled and budget-controlled funds. This commingling of funds in the clearing account prevents the Treasurer's Office from ensuring that they only register warrants from budget-controlled funds and that

only these unrestricted funds draw upon the available LOC. Using the Treasurer's Office current categorizing of funds as either cash-controlled or budget-controlled, the ARS limits registration to warrants issued from budget-controlled funds.

Because of the above mentioned difficulties, the desire to accommodate their clients, and the extra work required, the Treasurer's Office, until recently, has avoided formally registering warrants, choosing instead to allow the servicing bank to fund additional amounts in excess of the LOC limits or to internally fund overdrawn warrants from the investment pool.

The Treasurer Information System (TIS) produces the Warrant Registration Report, which shows summary dollar amounts for warrants eligible for registration. The Treasurer's Office uses the report, along with its operating knowledge of the Borrower's expected cash-flow position, to determine whether to cover overdrawn warrants from investment pool funds. However, the lack of real-time information about account status and transactions complicates control. Managers are not aware of the current status of their Treasurer's Office accounts and may not know if they are in a cash-deficit position. In contrast to real time reporting, reconciling items such as Treasurer Office initiated journal vouchers are not available until month end reports are distributed. Treasurer's Office staff does not know in a timely manner when a cash deficit has occurred and a warrant should be registered. Because of a lack of trended information, Treasurer's Office staff cannot identify a pool participant that has recurring cash deficits in order to take steps to safeguard assets.

Recommendations

The Treasurer's Office should consider:

- A. Revising policies and procedures to include procedures for authorization, recording, and reviewing of LOC borrowings made in excess of committed LOC limits. Such excess borrowings should be documented and periodically reviewed.
- B. Creating and maintaining a detailed Revolving Line of Credit Journal as prescribed by UAMACT and making relevant details available to participating entities on a timely basis. Use commonly available tools, such as Microsoft Access to maintain an accurate subsidiary journal, as UAMACT recommends, until a new system is implemented. Little manual labor would be involved.

- C.** Periodically reviewing and updating all LOC management and warrant registration procedures documentation.
- D.** Registering warrants when LOC limits are exceeded and additional credit is not extended through the servicing bank, placing the responsibility of appropriate cash management procedures with the borrower/district. Follow all UAMACT guidelines, including establishing a Registered Warrant Subsidiary Journal.
- E.** Ensuring new information system development incorporates business requirements accommodating a distinction between restricted and unrestricted school district funds. This will necessitate working with school districts that have systems that do not accommodate this distinction.
- F.** Addressing the ARS and UAMACT prohibition of loans exceeding LOC limits. If found to be disallowed, the Treasurer's Office should inform all LOC borrowers of these restrictions. In addition, review the contract language to ensure it complies with the UAMACT instructions.
- G.** Working with the servicing bank and the districts to ensure LOC adequacy.

Issue 2 Investment Function

Summary

The Treasurer and the Office's Portfolio Manager make key decisions about investments exceeding \$2 billion. For the period reviewed, we found the portfolio to be invested in compliance with State Statutes and with Treasurer's Office policy. We also found that interest is apportioned in compliance with authoritative guidelines. However, investment procedures and day-to-day investment decisions are not documented and sufficient analytical investment information is not compiled and disseminated to investment pool participants. The Treasurer should consider establishing an investment advisory group, document its strategy and procedures, and provide useful portfolio performance reports to investors.

Investment Process

The Treasurer's Office \$2.4 billion investment portfolio as of September 30, 2006, met requirements set out in ARS and in the Treasurer's Investment Policy. However, the Treasurer has the statutory authority to use various investment strategies, including longer investment terms, to increase yield potential and diversification. ARS does not limit the percentage or amount by category of investment. At the time of our review, however, we did not find any questionable investment activity.

The Treasurer's Office does not currently measure portfolio performance to comparable benchmarks. To verify market rates of return are being achieved, the Government Finance Officers Association and Treasury experts recommend benchmarking portfolio performance. The Portfolio Manager was using the State's investment portfolio returns as a benchmark, but due to the significant difference in the composition of the two funds, the comparison is now considered inadequate by the Treasurer's Office and has been discontinued. The Treasurer's Office has not identified a replacement benchmark. At a minimum, the Treasurer's Office could compare its portfolio investment performance to the prevailing U.S. Treasury bill or note performance for equivalent maturity periods.

Investment Decision Making

Given the size of the investment pool and the number of public and quasi-public entities that depend on the funds, the Treasurer's Office needs to expand investment decision making beyond the Portfolio Manager and the Treasurer and document day-to-day investment decisions. Documentation should conform to public record statutory requirements:

"All officers and public bodies shall maintain all records, including records as defined in section 41-1350, reasonably necessary or appropriate to maintain an accurate knowledge of their official activities and of any of their activities which are supported by monies from the state or any political subdivision of the state." ARS Section §39-121.01. B

The Government Finance Officer's Association (GFOA) recommends that state and local treasurer functions implement detailed written investment policies and procedures that document investment strategy, quantify types of portfolio risk, and describe optimal performance reporting. GFOA also suggests implementation of an investment committee. The establishment of a formal investment advisory group could improve the decision-making process, as potential investment opportunities for the pool participants would be analyzed in an open forum. This group could be involved in establishing an authorized broker/dealer list.

Board of Deposit

As the Board of Deposit, the Board of Supervisors may order the Treasurer's Office to sell securities. Quarterly reporting by the Treasurer's Office of their portfolio holdings to the Board meets statutory requirement. Additional information, such as comparative benchmarking, should be provided to assist the Board in assessing the County investment pool portfolio performance and to review the selection of brokers and dealers used to trade investments.

Portfolio performance reports received by the Board and other pool participants do not provide enough information to analyze performance in detail. UAMACT states, "Communication of portfolio performance improves the portfolio manager's accountability to pool participants. It also enables detection of errors in interpretation of policies and statutes. Additionally it allows the participating entities to evaluate their risks and return from participation in the investment pool."

Physical Access

The Treasurer's Office needs additional physical security controls in place to prevent unauthorized access to the first floor work center which includes the investment desk. An unauthorized individual could gain access to the first floor work center and potentially harm employees or access sensitive data (*e.g.*, documents, information systems, *etc.*). The Treasurer's Office should work with Facilities Management to construct barriers to minimize the risk of unwanted access.

Investment Pool Participation and Reporting

The Treasurer's Office is responsible for the safekeeping, management and disbursement of investments and any interest received (revenue). The Treasurer allocates interest to all pool participants on a quarterly basis, but the interest is calculated monthly on the average daily balance of each entity. Although interest apportionment is based on one of the methods prescribed by UAMACT and is in line with practices at other counties in state of Arizona, current interest apportionment procedures do not provide for reporting portfolio performance and portfolio constitution to the pool members. Lack of a reporting procedure for key metrics like portfolio performance and portfolio constitution, restricts the entity management from evaluating their risks and return.

When pool participants experience a fund deficit, the Treasurer's Office is responsible for calculating and allocating interest expense. Interest on negative fund balances is calculated on a monthly basis, on the average daily balance outstanding, and is paid quarterly. Interest on negative balances is apportioned to the same account to which positive interest is allocated. This treatment is in line with the procedure prescribed by UAMACT.

Recommendations

The Treasurer's Office should:

- A.** Update broker/dealer selection and investment policies and procedures in accordance with current practices and systems, and review them at least annually for necessary revisions.
- B.** Establish an investment advisory group to provide the Portfolio Manager investment decision oversight and to assist in establishing investment strategies. We also recommend that this group adequately document investment strategy positions.
- C.** Revise current investment portfolio reporting to include a comparative analysis of appropriate money market and fixed income benchmarks in an easily understandable format.
- D.** Ensure that all updates to the authorized broker/dealer list are approved by the investment advisory group or a delegate that is not directly responsible for investment portfolio management activities.
- E.** Provide a quarterly summary report detailing the portfolio performance and portfolio constitution to pool participants.
- F.** Work with Facilities Management to secure physical access to the first floor work area, including the investment desk and equipment

Issue 3 Human Resource Management

Summary

We noted human resource management weaknesses in the investment operations area. Qualified professional staff backup is needed for the Investment Portfolio Manager and other key positions. Rigorous background checks are not routinely performed for investment-related staff. Although examining staffing needs was not an objective of this audit, we also observed several other positions that lacked sufficient qualified backup. The Treasurer's Office should revise the Portfolio Manager position description and keep it updated, provide for succession planning for key staff, and strengthen employee screening.

Portfolio Manager Function

The Treasurer's Office has not revised its operational policies, procedures, and job description for the Investment Desk in some time; the majority were revised in 1998. For example, the Portfolio Manager job description refers to a reporting relationship which is no longer correct. As a result, the policies and procedures do not portray current practices.

A position description is a key management document that can reduce the likelihood of unauthorized actions occurring from an inadequate understanding of job scope, reporting relationships, or duties and responsibilities. An inaccurate job description impairs the ability of a successor to effectively assume their role.

Although the position is critical to safeguarding investment pool funds totaling \$2.4 billion, the Portfolio Manager does not have a professionally trained qualified staff backup to ensure adequate coverage of functions. Further, succession planning is needed if the Portfolio Manager is unable or unwilling to continue work. We also observed a lack of succession planning and reliance on long term, one-deep employees in the accounting and IT areas. These are also functions where a lack of documentation forces the Office and its clients to rely on institutional memory.

No additional background checks beyond the County standard are performed on Treasurer's Office employees with investment-related responsibilities. Rigorous background checks are considered a basic control to guard against risk to the investment pool from potential fraud and are common in the treasury function of the corporate and banking sectors.

Recommendations

The Treasurer's Office should:

- A.** Update the Portfolio Manager job description to accurately define the current role, responsibilities and reporting relationships, and revise periodically.
- B.** Establish a qualified professional staff backup for the Portfolio Manager and provide cross training to perform the same functions that the Portfolio Manager performs on a short-to-medium term basis, and for the longer term, as part of succession planning.
- C.** Perform additional background checks for personnel with an active role in investment management.

Issue 4 Chart of Accounts

Summary

The current structure of the Treasurer's Office chart of accounts does not sufficiently meet the requirements of County management or the County Superintendent of Schools. It does not have the flexibility to keep pace with clients' growing needs and complicates client financial analysis. Treasurer's Office system development strategies should address chart of account deficiencies.

TIS Enhancements

The Treasurer's Information System (TIS) system does not work optimally with the Department of Finance's Advantage 2.0 system and with the County School Superintendent's finance system, Vision. TIS does not support key system-users' financial management requirements.

For example, the Treasurer's Office cannot assign corresponding fund numbers in TIS for special revenue funds added by the Department of Finance to its Advantage 2.0 system. The TIS field sizes are too small. When the TIS system cannot keep pace with growth in the Department of Finance chart of accounts, Finance must combine funding sources and recycle numbers. This practice hampers the Department's ability to perform year-to-year trend analyses.

Also, the TIS Category field that identifies whether the account belongs to the County or to a school district, is not always coded correctly. Treasurer's Office personnel determined that they would not update category codes for entities with recent legal changes, to avoid asking entities to make changes in their accounting systems. For example, the Special Health Care District funds continue to be incorrectly coded in TIS as a component unit of the County although the District separated from the County two years ago. Treasurer staff states that neither the District nor the County has requested a change.

Some codes are incorrect due to lack of research and documentation when new entities are formed. Treasurer's Office staff code newly-organized Special Taxing Districts without validating entity type. Instead, Treasurer's Office personnel rely on their prior experience and personal knowledge of special district types.

The primary mitigating control over incorrect coding is the institutional knowledge of the long-term accounting staff. Given the Treasurer's Office critical operations and its lack of succession planning, reliance upon the institutional knowledge of these employees is not optimal.

Recommendations

The Treasurer's Office should:

- A.** Ensure that all TIS fund data is validated and correctly reflects basic ownership and categorization.
- B.** Ensure that new system development includes appropriate business requirements for the chart of accounts and input from key stakeholders such as the County Finance Department and County Superintendent of Schools Office.
- C.** Consider pursuing legislative changes to Article 48 (special districts) in concert with the County's Governmental Relations Office to ensure the Article's directives regarding the Treasurer's role are clear and consistent.

Issue 5 Information System Strategy

Summary

A fundamental challenge for the Treasurer's Office has been to implement a cohesive strategic plan to ensure alignment with business goals. The Treasurer's Office does not have an information technology strategic plan, although since 1998, staff has recognized and discussed the critical operational need to replace the legacy system. New system plans should be executed through a formal information technology governance process as a high priority to ensure sufficient progress and accountability.

Treasurer's Information Systems

The Treasurer's Office IT organization has been operating and supporting two systems environments for the past eight years. First, IT manages the Treasurer's Office main automated applications for operations, property tax, and accounting systems, which were developed in-house in 1988. Although components were upgraded in subsequent years, the basic applications are written in COBOL. Skilled COBOL programmers are becoming scarce and more costly as newer programming languages have been introduced. Therefore, modifications to the basic applications (operations, property tax, accounting) have been confined to maintenance changes, such as those required by changes in statute, banking arrangements, and policy. For example, the conversion from Chase Bank to Bank of America, was the top priority in 2006.

To accommodate other IT needs, the second system environment, NextTIS (windows-based applications), was introduced in 1998. The Treasurer's Office used this second environment to develop and implement new applications, such as Investment Tracking, using Microsoft Windows.

Main System

The Treasurer's Office main information system is structured using old architecture and tools. The system was developed in-house. Consequently, the system is unique to the County and must be maintained, upgraded, and secured solely by the Treasurer's Office staff or at great expense by outside consultants. The majority of the Information Systems Division Manager's time is devoted to maintaining the existing COBOL applications at the expense of leading IT strategic planning. The legacy system lacks:

- Analytical tools
- Real time reporting
- Flexibility
- Ability to interface effectively with key users' systems (Advantage 2.0, Visions, others). This necessitates inputting the same data twice, once into each system, increasing the possibility of omission, error, and higher costs.

The Treasurer's Office Information Systems Department (ISD) has 17 positions, including five openings, two of which were added in FY2007. ISD accounts for approximately 25 percent of the Treasurer's Office staff. The combined Information Systems expenditures, General Fund and Taxpayer Information Fund, for FY05 and FY2006 were \$1.2 million per year, approximately 25% of the Treasurer annual expenditures.

Furthermore, the control of, and documentation for, system programs and interface changes have not been maintained as required to safeguard the system. As mentioned, TIS (Treasurer Information Systems) does not work optimally with newer more flexible systems used by investment pool participants.

Over the years, attempts have been made to transition TIS to a supportable and enhanced information system suited to current Treasurer's Office operations. A new system has been under discussion for over eight years. In FY2006, the Treasurer's Office requested two new developer positions in order to continue the migration from their COBOL/VMS system to a newer platform. The Treasurer's Office budgeted \$150,000 for the new positions. However, the Treasurer's Office stated that the original informal system plan that was the basis for requesting the two new positions has been discarded. The Treasurer's Office is developing another new plan. A robust strategic plan would mitigate all of these various attempts to fix their aging system.

Strategic Approach

Agency-wide system development projects require formal project definition and a strategic, structured management approach to achieve desired results. Collectively, these types of practices are termed "IT governance." Sufficient funds and management support must be committed over the entire development and implementation period to assure success. Best practices suggest that organizations should define a major project for the undertaking, with earmarked budget over a 3- to 5-year time frame. Once the strategic plan is in place, the Treasurer's Office should employ project management and system development methodologies. The system changeover will affect all aspects of Treasurer's Office operation. Plans should address this comprehensive change and the need for identifying all stakeholders, user groups, and projected resource requirements. The Office can benefit by involving the Office of Enterprise Technology and by referring to industry standard planning models, such as the IT Governance Institute's COBIT model, and successful County models. As a step in this direction, the Treasurer's Office hired an application development manager who previously worked on a large County IT project.

Current Treasurer Information Systems

In addition to the need to strategically plan for new system development and implement IT governance, controls over system access, system modifications, and system continuity need to be improved.

Authorized Access

The Treasurer's Office does not review system access permissions at formal intervals within TIS and NexTIS to ensure that users:

- Are authorized to access the system
- Do not have excessive access permissions

These reviews protect against users (for example, an employee or outside agency) adopting or retaining system privileges that allow them to perform unauthorized activities.

The Treasurer's Office uses IDs and passwords to authenticate TIS and NexTIS users. We identified the following password management control weaknesses:

- The Windows-based applications do not limit the number of unsuccessful logon attempts
- The Windows-based system logs are not regularly reviewed to monitor failed logon attempts
- Easy-to-guess passwords are assigned when creating new user accounts

Strong password management helps prevent unauthorized users to gain greater access.

Change Controls

The Treasurer's Office has implemented controls over application modifications to ensure that changes are authorized and appropriate, however, we noted the following control weaknesses:

- Users submit individual Treasurer Application Requests to the IT Department, but key external and internal users are not involved with prioritizing and approving requests
- Application test plans are not formally documented and do not clearly identify all parties required in order to adequately complete testing
- Developers have the ability to introduce their own changes into production systems
- There is no comprehensive documentation that defines the interconnection between all applications and subsystems
- Emergency changes are reviewed by the IT department, however, there is no formalized process for reviewing and assessing their appropriateness

Business Continuity and Disaster Recovery

The Treasurer's Office has implemented many safeguards, such as a robust tape backup process and efficient server management, to help ensure the availability and reliability of its systems. However, during our review, we noted the Treasurer's Office does not perform scheduled tape restorations to validate the accuracy and reliability of the tape backup process.

Furthermore, many of the Treasurer's Office critical information systems are not connected to an uninterruptible power supply. In the event of a disaster to the data center or a loss of electricity, the Treasurer's Office may not be able to adequately continue operations or to restore daily transactions. The Treasurer's Office staff state that they have been requesting disaster recovery plan assistance from County management for approximately two years.

Recommendations

The Treasurer's Office should:

- A. Define a strategic IT planning process, including required resources and the establishment of a steering committee composed of elected/appointed officials, operations, and IT management. This committee would sign off on the strategic IT plan, determine prioritization of development projects, track project status, and resolve resource conflicts.
- B. Once the process is defined, develop a 3 to 5 year strategic IT plan, in cooperation with key stakeholders, that aligns with the Treasurer's Offices strategic goals. The plan should

cover IT investment/operational budget (including funding sources), acquisition strategy, technology direction, and the information architecture.

- C.** Implement a process to regularly review system-access permissions. This process should include:
- Soliciting input every 90 to 180 days from external agencies about the status of users accessing the Treasurer's information systems
 - Reviewing user profile assignments every 90 to 180 days
 - Reviewing employee status for all internal users every 90 to 180 days
 - Conducting a detailed user profile review on all user profiles every 1 to 3 years
- D.** Enhance password management controls to include account log-out
- E.** Develop formalized systems development and project management methodologies
- F.** Procure and implement as soon as possible an uninterrupted power supply to properly maintain electrical power to critical information system components
- G.** Implement a formalized process to regularly restore backup tapes in order to validate their accuracy and reliability

Issue 6 Taxpayers' Information Fund

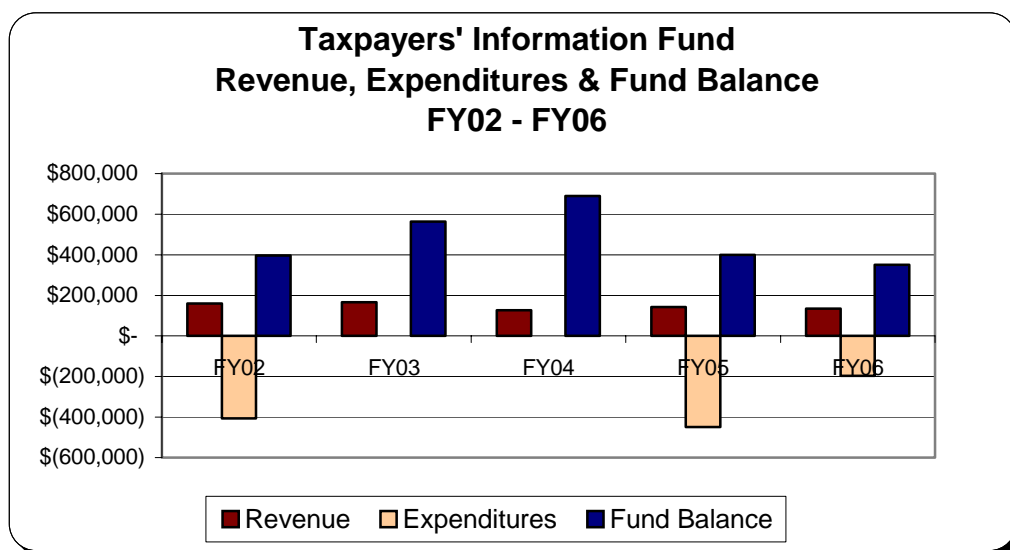
Summary

The Treasurer's Office has a dedicated source of available funds, the Taxpayers' Information Fund, which is restricted for information technology upgrades. However, funds are not included in the County budget which functions to provide revenue and expenditure control. To ensure that the Treasurer's Office financial resources are appropriately controlled, Taxpayers' Information Fund activity should be included in the Treasurer's Office budget.

Restricted Funds for Information Systems Development

The Treasurer's Office has a source of funding for operations in addition to the general fund. The Taxpayers' Information Fund (TIF) is a special revenue fund established in accordance with ARS §11-495 for information technology expenditures related to converting or upgrading automated public information systems. Although this is a taxpayer-provided revenue for a government entity, TIF is not included in the County budget. Both Pima and Pinal Counties control their TIF funds through their county budgets.

The following five-year trend of Treasurer's Office TIF revenue and expenditures shows an average annual expenditure of \$210,000, with a peak total annual expenditure of \$449,000 in FY2005. The average annual revenue for this period was \$146,000 and, as of December 2006, the fund balance was \$239,000. From FY 2002 to 2006, the Office has expended \$1,050,608 from this fund.



Source: Audit analysis of Treasurer Data

The TIF is tracked only within the Treasurer's Office general ledger. As a result, significant amounts of IT funding do not come under the scrutiny of the County's Office of Management and Budget. Combining the TIF and General Fund IT expenditures for FY2005 and FY2006 shows that one-fourth of the Treasurer's Office IT expenditures were off budget, as shown on the following page. Revenue

that could be used to upgrade the Treasurer's Office IT, for example, would be understated on the adopted County business plan.

Treasurer's Combined IT Expenditures

	FY05	FY06
Budgeted IT Program Expenditures	\$744,985	\$1,070,609
Non-budgeted TIF Expenditures	\$448,979	\$195,920
Total Treasurer IT Expenditures	\$1,193,964	\$1,266,529

Source: Audit analysis of Treasurer and DOF data.

Inadequate oversight, including budgeting, of TIF can lead to use of this restricted revenue for purposes other than to "defray the cost of converting or upgrading an automated public information system." For example, in FY2007, the Treasurer's Office issued a check for \$38,000 of these restricted funds to remodel the Cashier area. During the audit, the check was voided.

Recommendation

The Treasurer's Office should work with Office of Management and Budget to include the Taxpayers' Information Fund revenue and expenditures in the County's budget and ensure revenues and expenditures are compliant with the associated Statute (ARS §11-495).

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